Contents

[Use Case Diagram 2](#_Toc435312243)

[Login 3](#_Toc435312244)

[Bootstrap 4](#_Toc435312245)

[Delete location via file upload 5](#_Toc435312246)

[Delete location via UI 5](#_Toc435312247)

[Basic app usage report (Breakdown by app category) 6](#_Toc435312248)

[Basic app usage report (Diurnal Pattern) 7](#_Toc435312249)

[Basic app usage report (Breakdown by usage time category and or demographics) 8](#_Toc435312250)

[Top-k students or schools with most app usage (given an app category) 9](#_Toc435312251)

[Top-k most used apps (given a school) 10](#_Toc435312252)

[Smartphone Overuse Report 11](#_Toc435312253)

[Smartphone Usage Heatmap 12](#_Toc435312254)

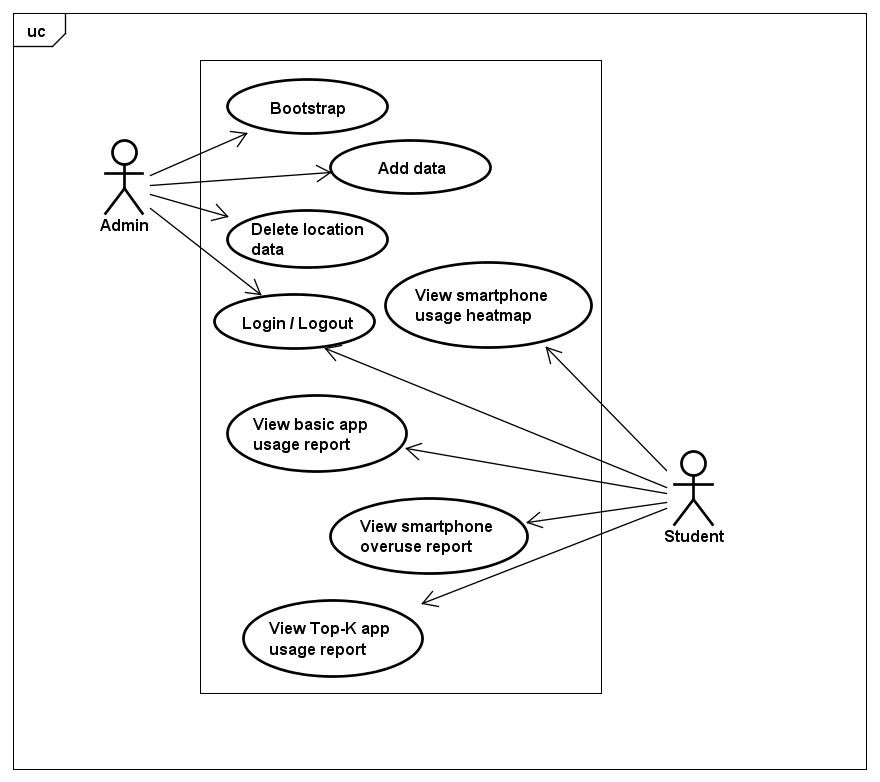
[Class Diagrams 13](#_Toc435312255)

[Core Entity 13](#_Toc435312256)

[Controller and DAO 14](#_Toc435312257)

[Logical Diagram 15](#_Toc435312258)

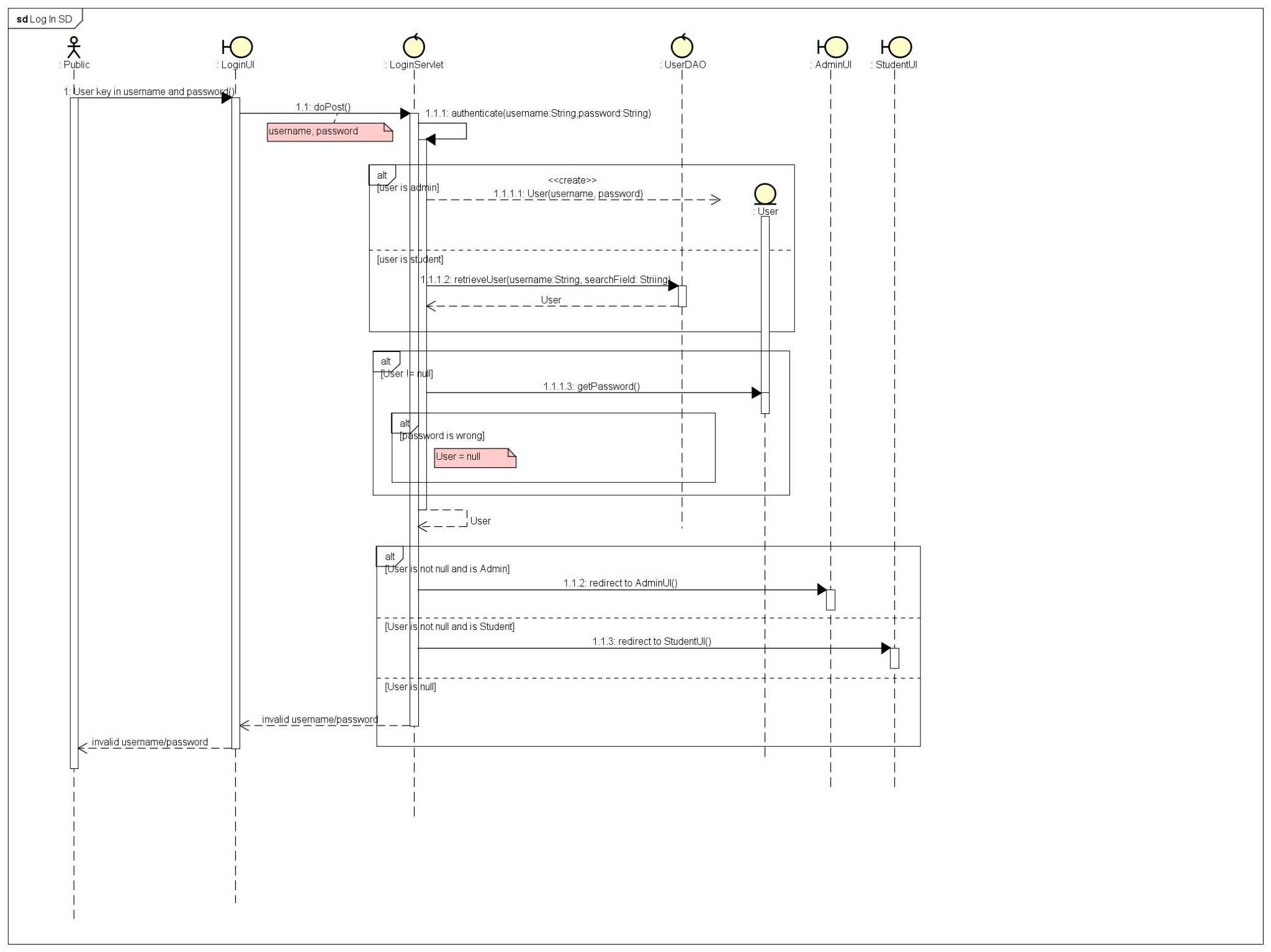
## Use Case Diagram



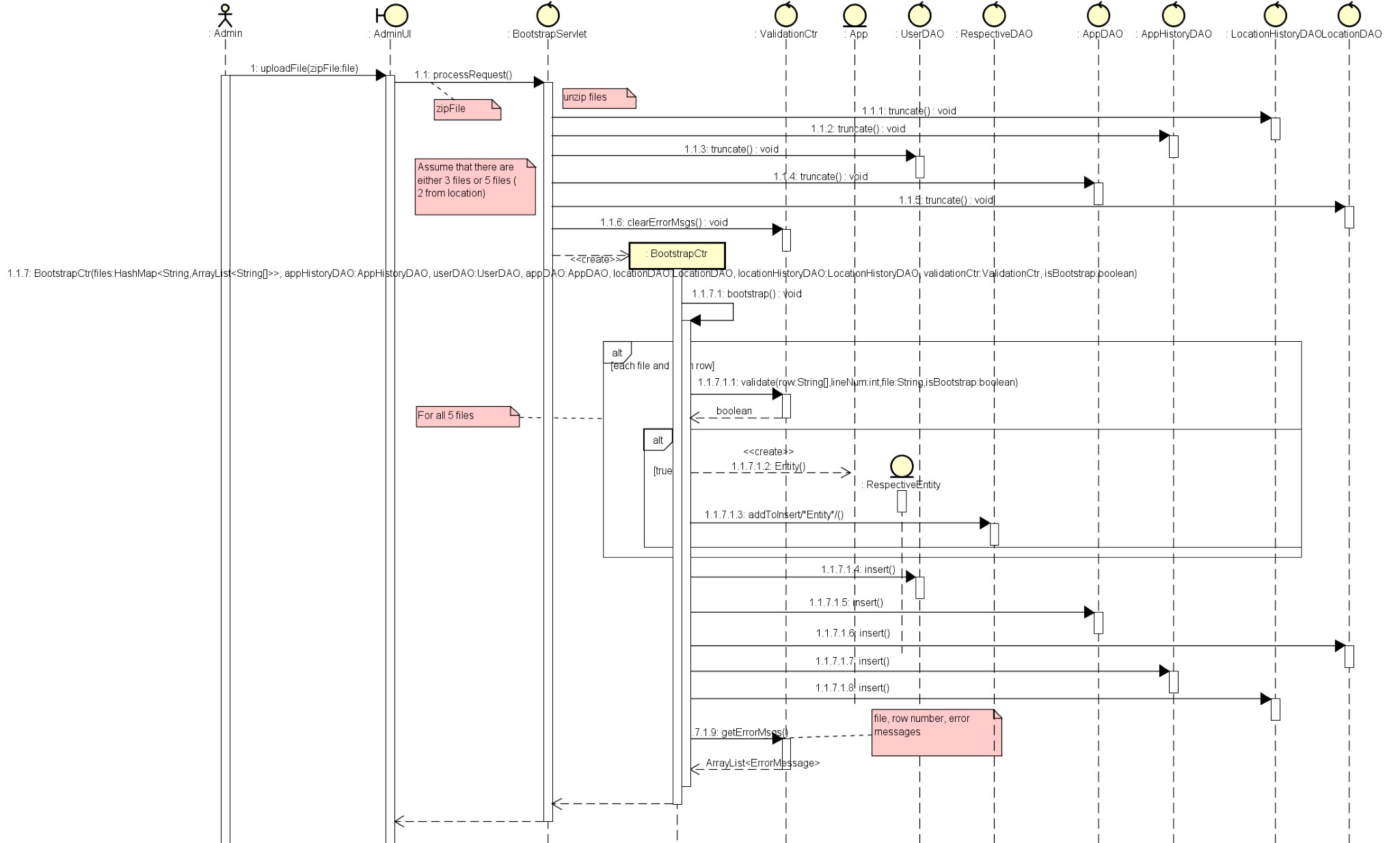
|  |  |
| --- | --- |
| **Use case** | **Description** |
| 1. Login / Logout | Admin and Student can log into and out of the SMUA system with a valid email ID and password. |
| 2. Bootstrap | Admin can bootstrap the SMUA system with app-lookup, app, demographics, location and location-lookup data. |
| 3. Add data | Admin can add new app, demographics and location data while the app is running. |
| 4. Delete location data | Admin can delete a subset of location data through uploading location-delete file or specify details of data to be deleted. |
| 5. View basic app usage report | Student can view the app usage stats breaking down by usage time category, usage time category and demographics, app category and diurnal pattern for any given duration. |
| 6. View Top-K app usage report | Student can view top-k users, apps and schools for any give duration and app category. |
| 7. View smartphone overuse report | Student can see his smartphone overuse index based on smartphone usage time, gaming time and frequency of checking smartphones. |
| 8. View smartphone usage heatmap | Student can view the density of people using smartphone at any given floor in SIS building, date and time. |

Sequence Diagrams

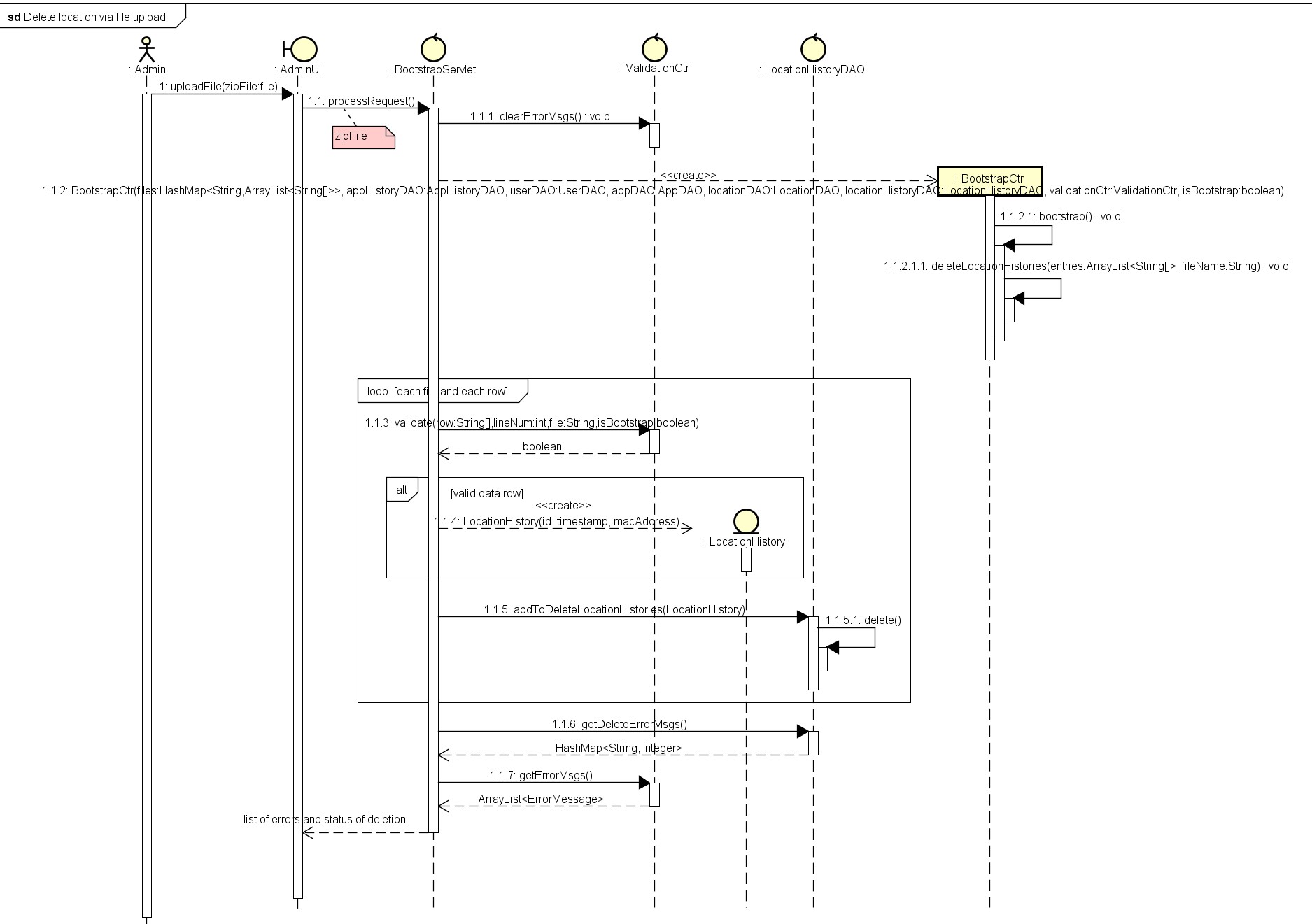
## Login



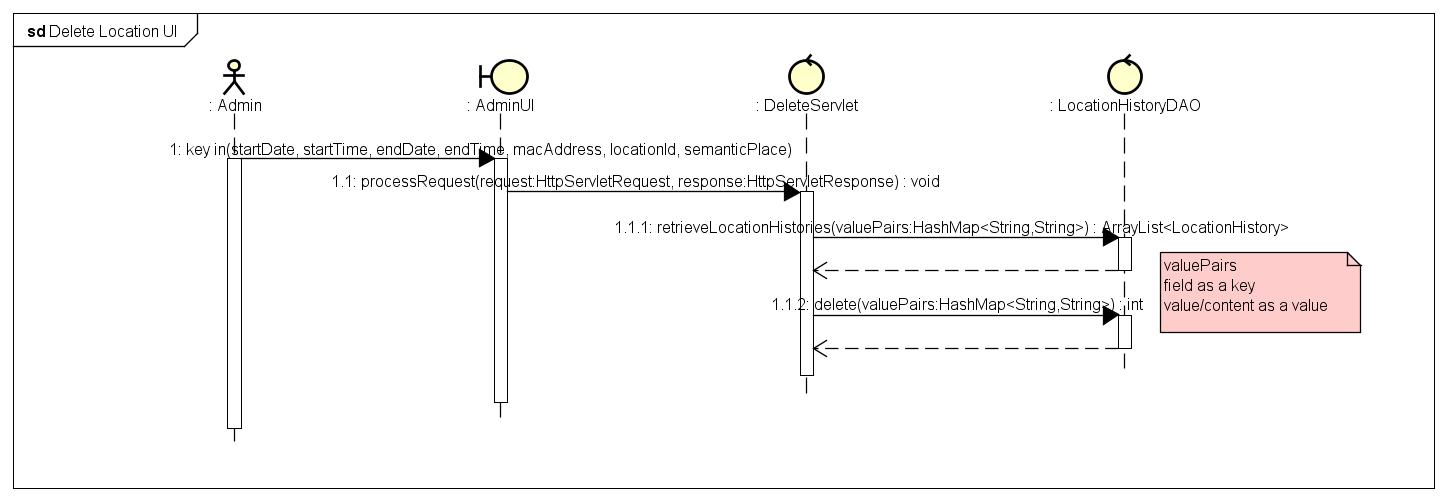
## Bootstrap



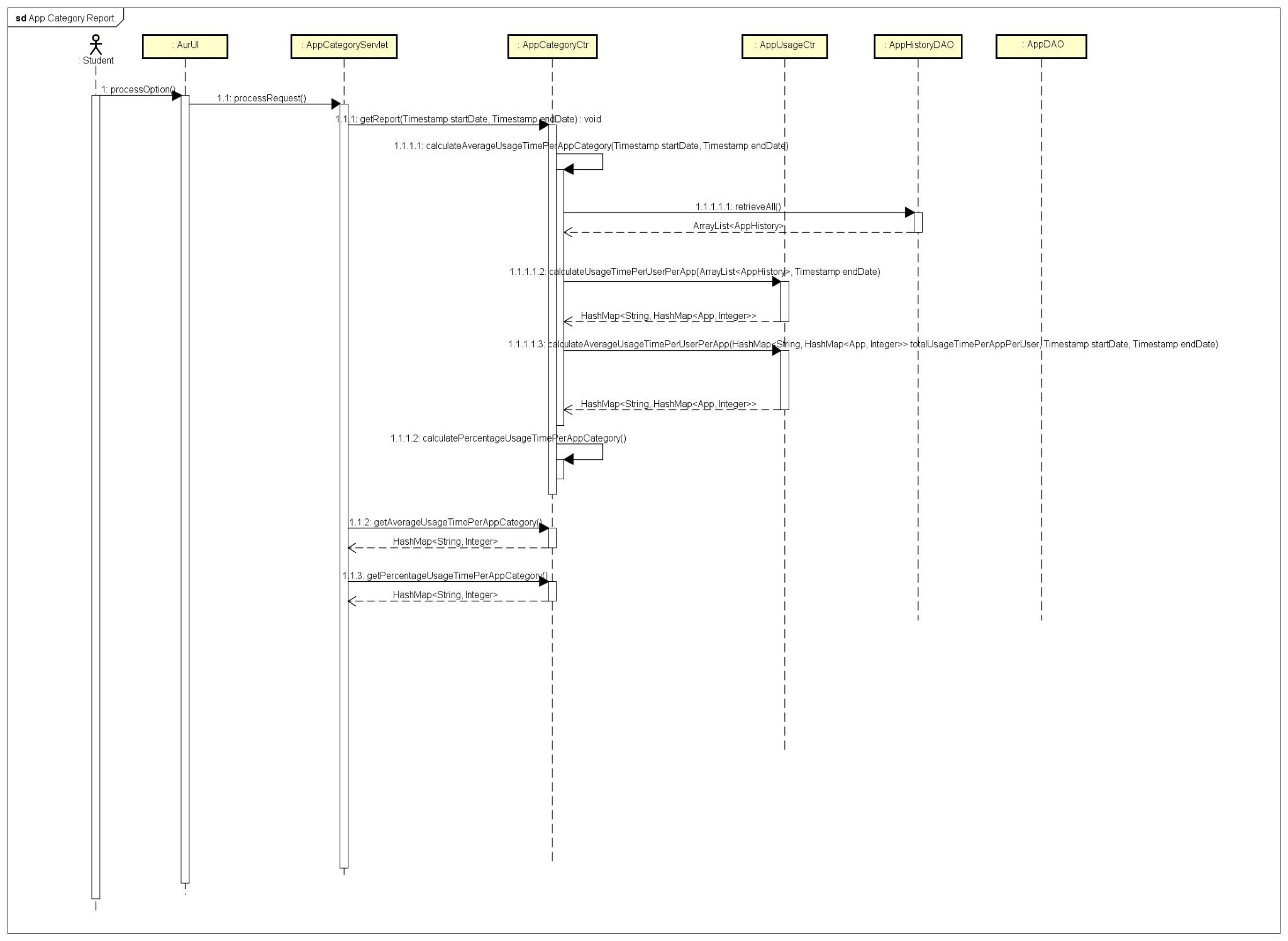
## Delete location via file upload



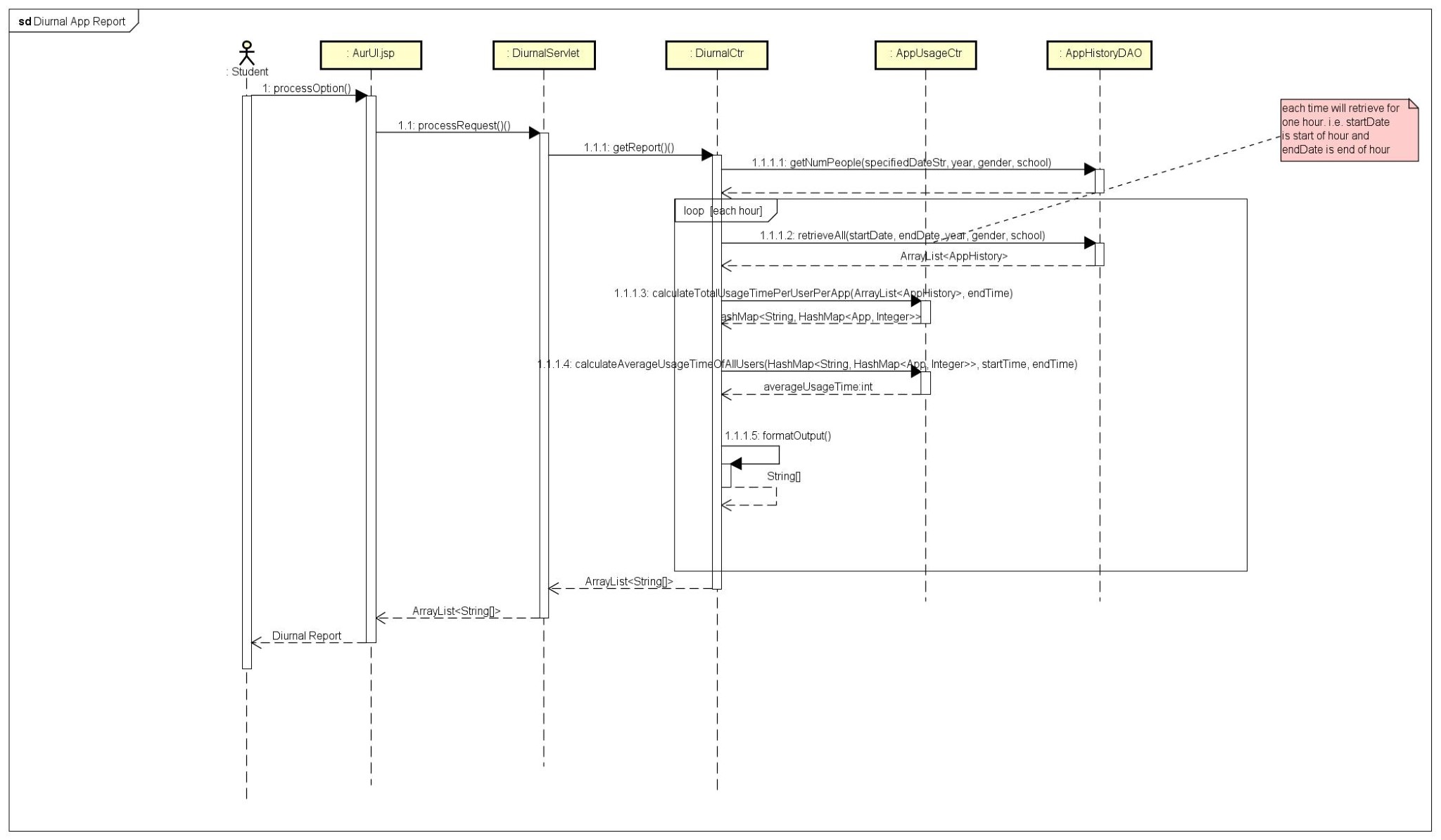
Delete location via UI



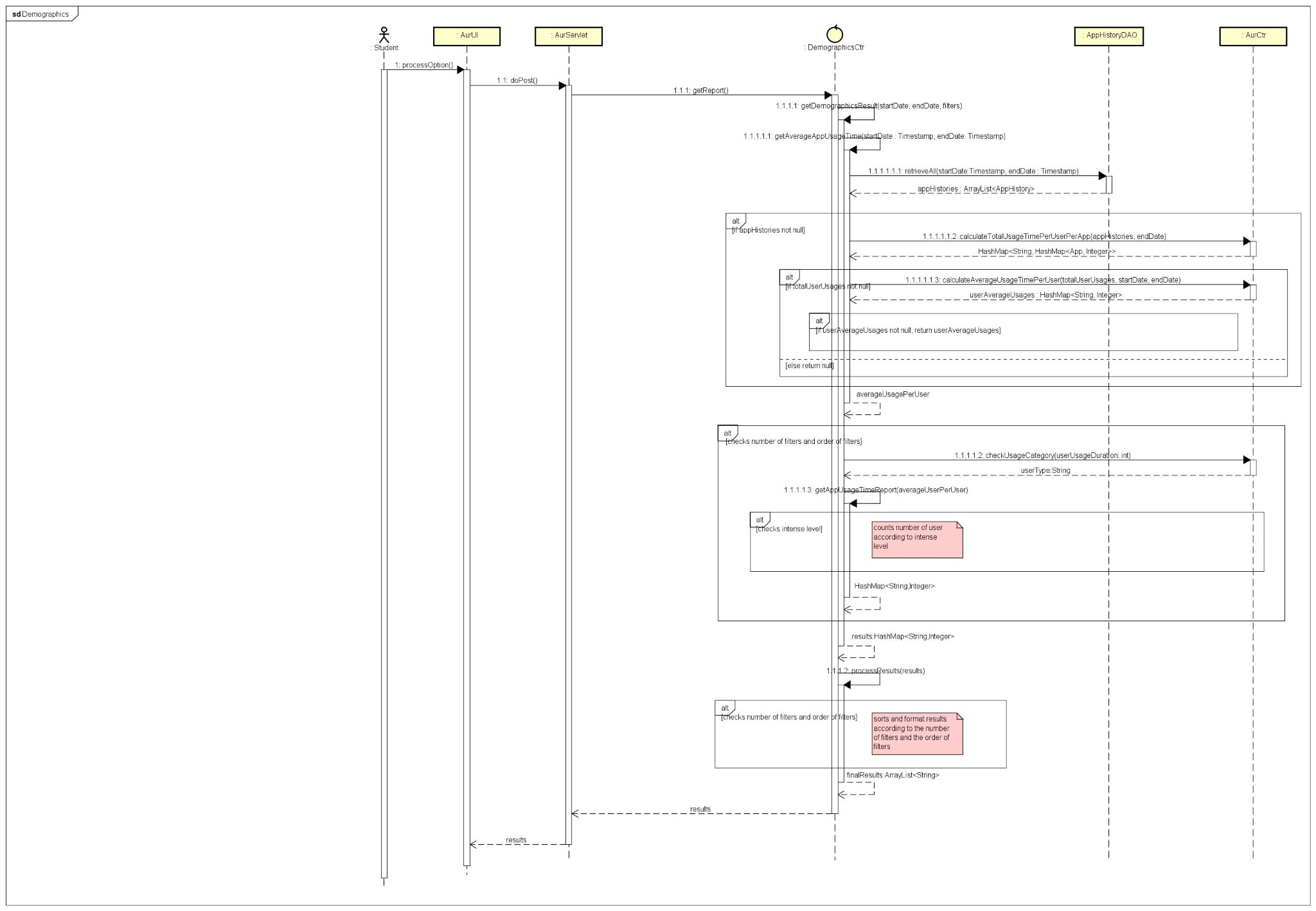
## Basic app usage report (Breakdown by app category)



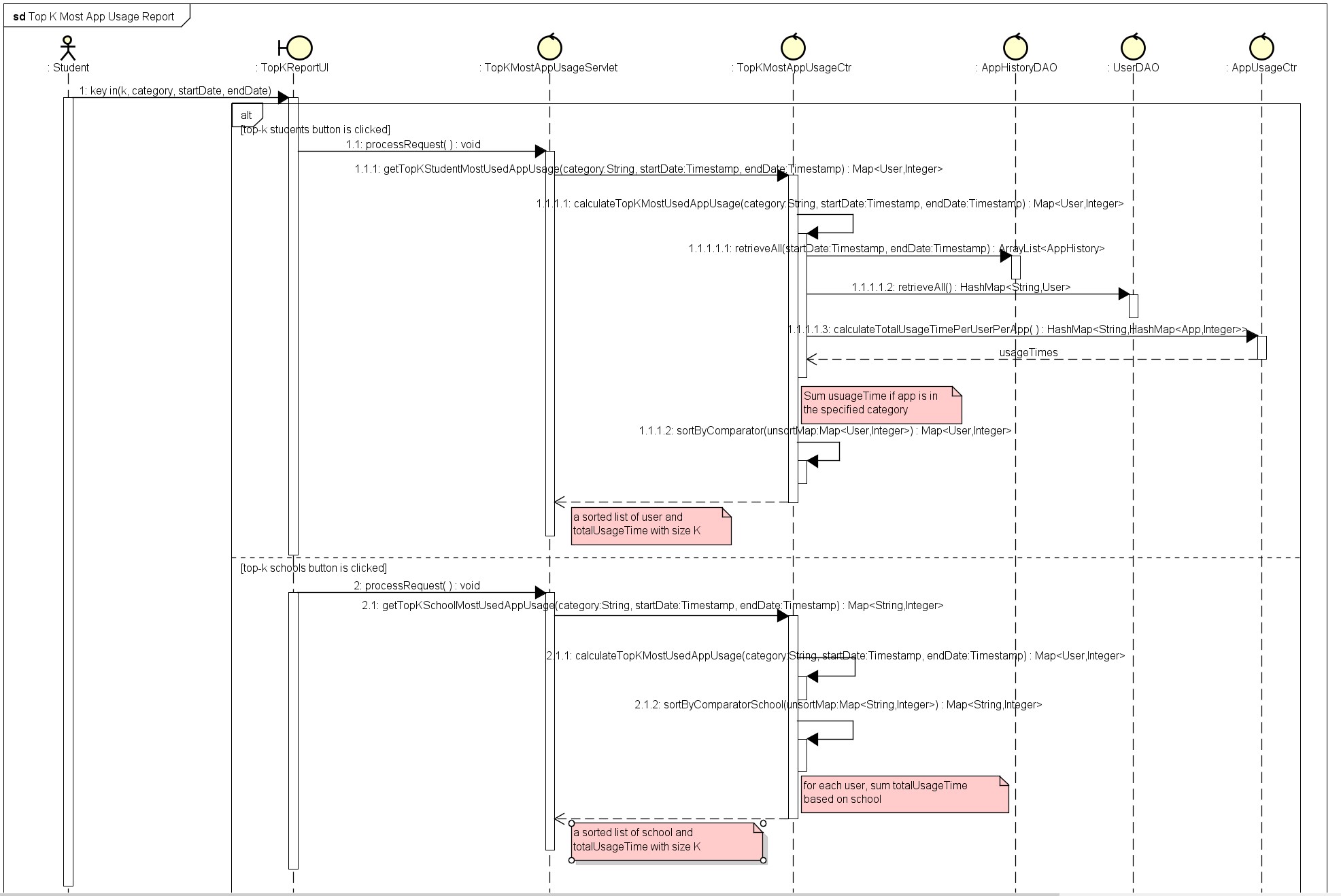
## Basic app usage report (Diurnal Pattern)



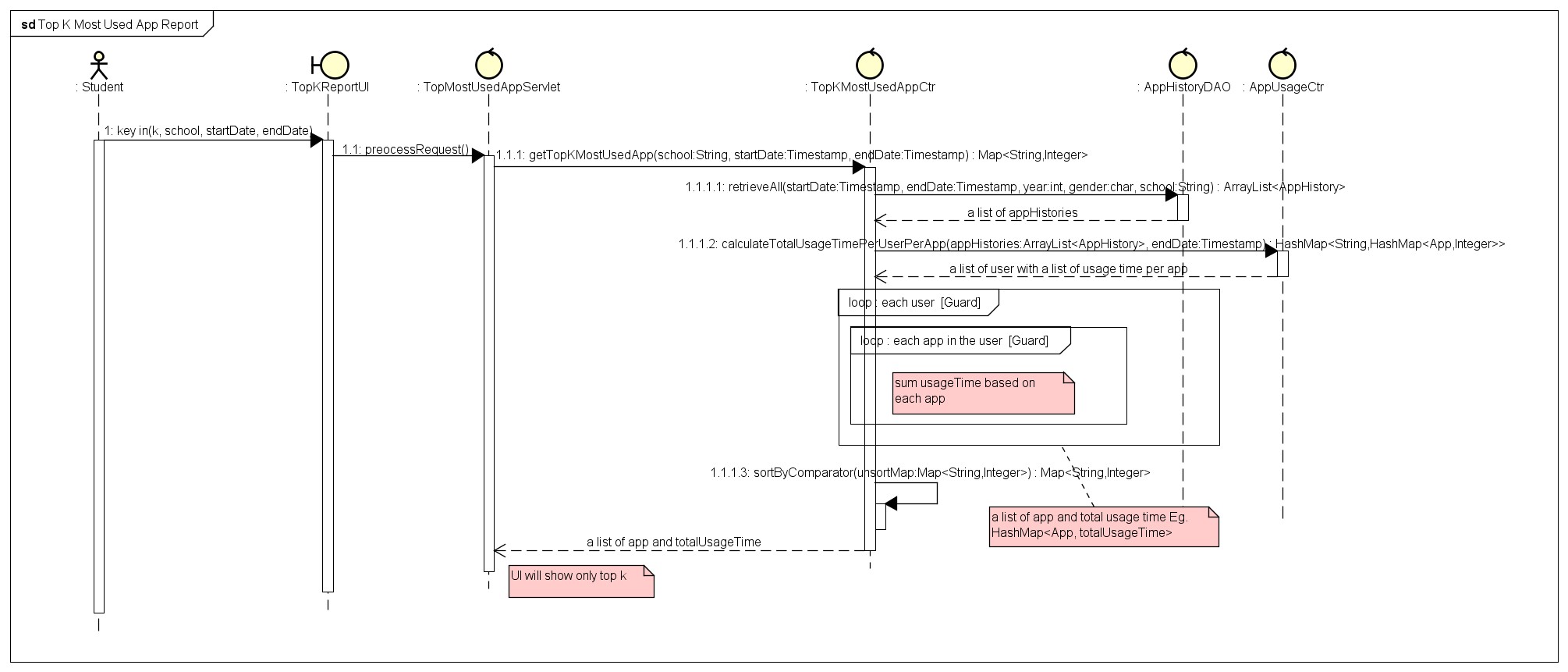
## Basic app usage report (Breakdown by usage time category and or demographics)



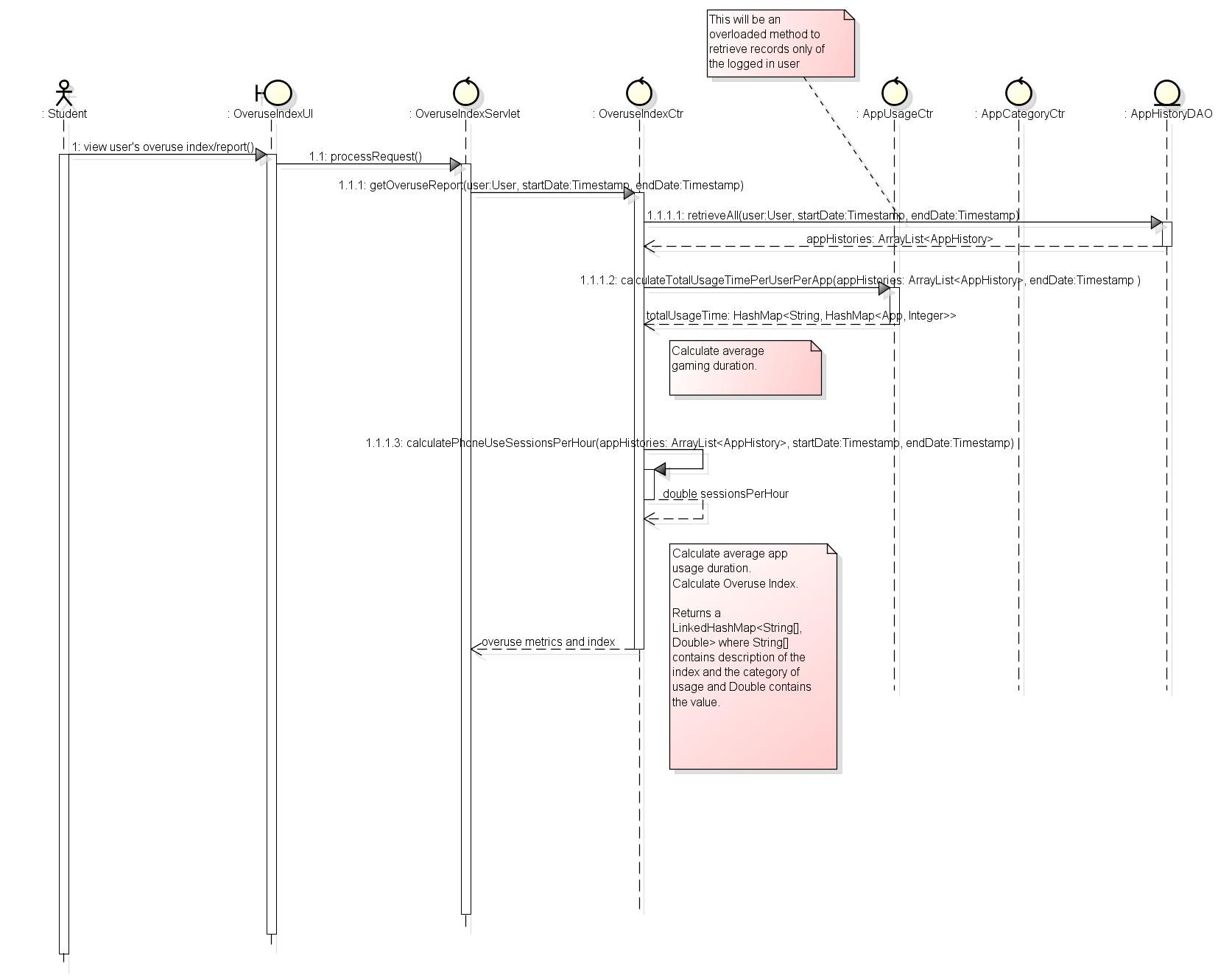
## Top-k students or schools with most app usage (given an app category)



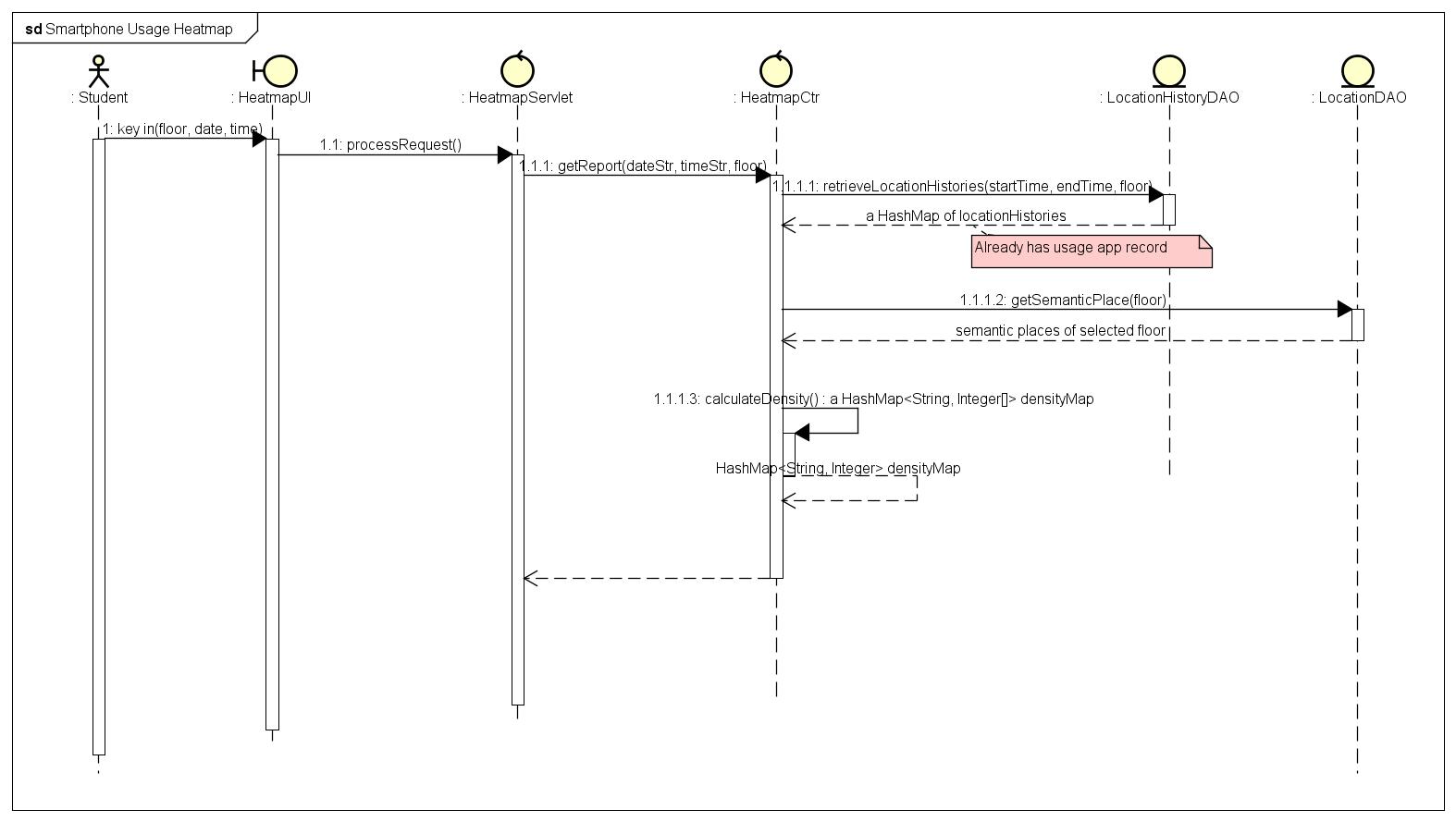
## Top-k most used apps (given a school)



## Smartphone Overuse Report

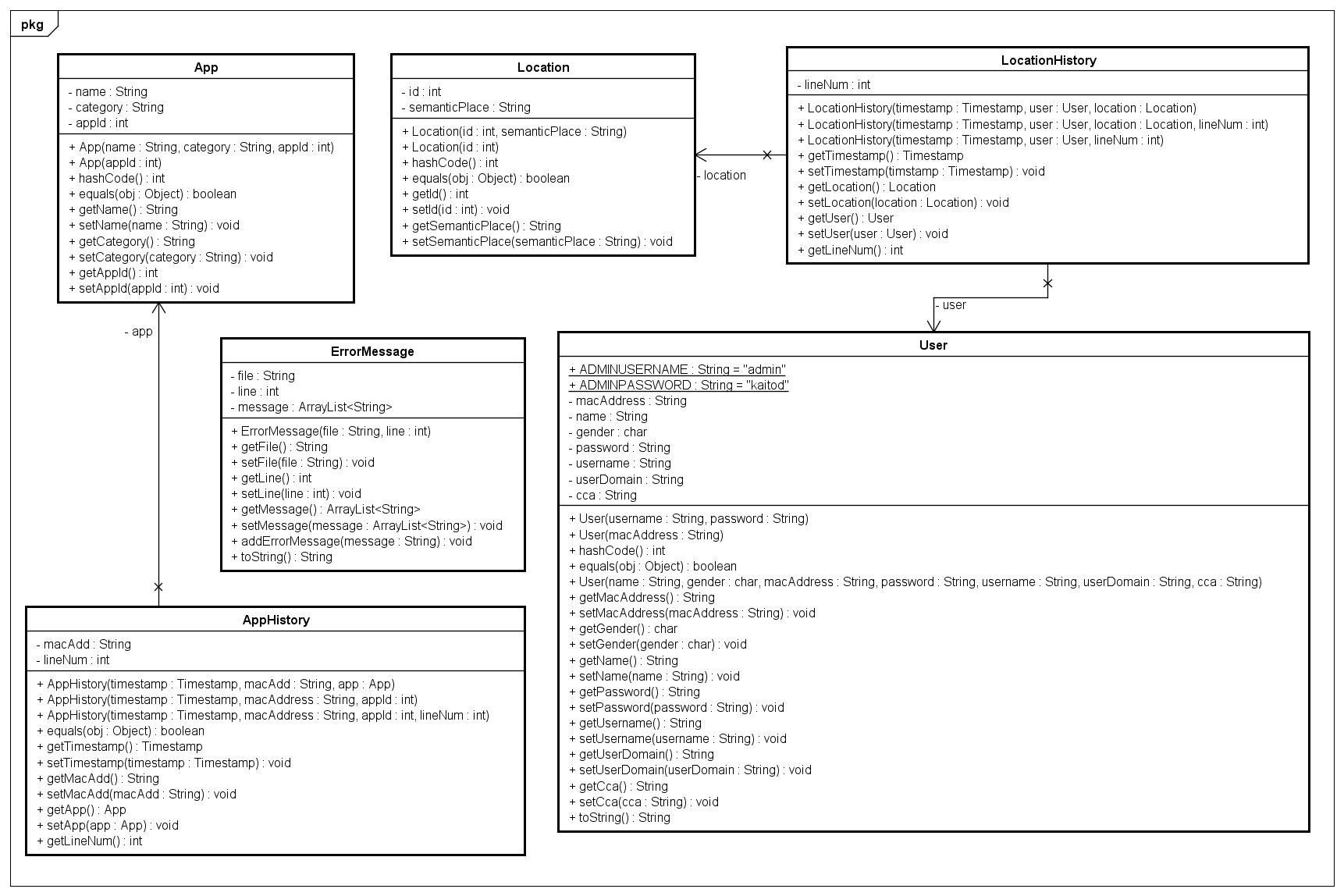


## Smartphone Usage Heatmap

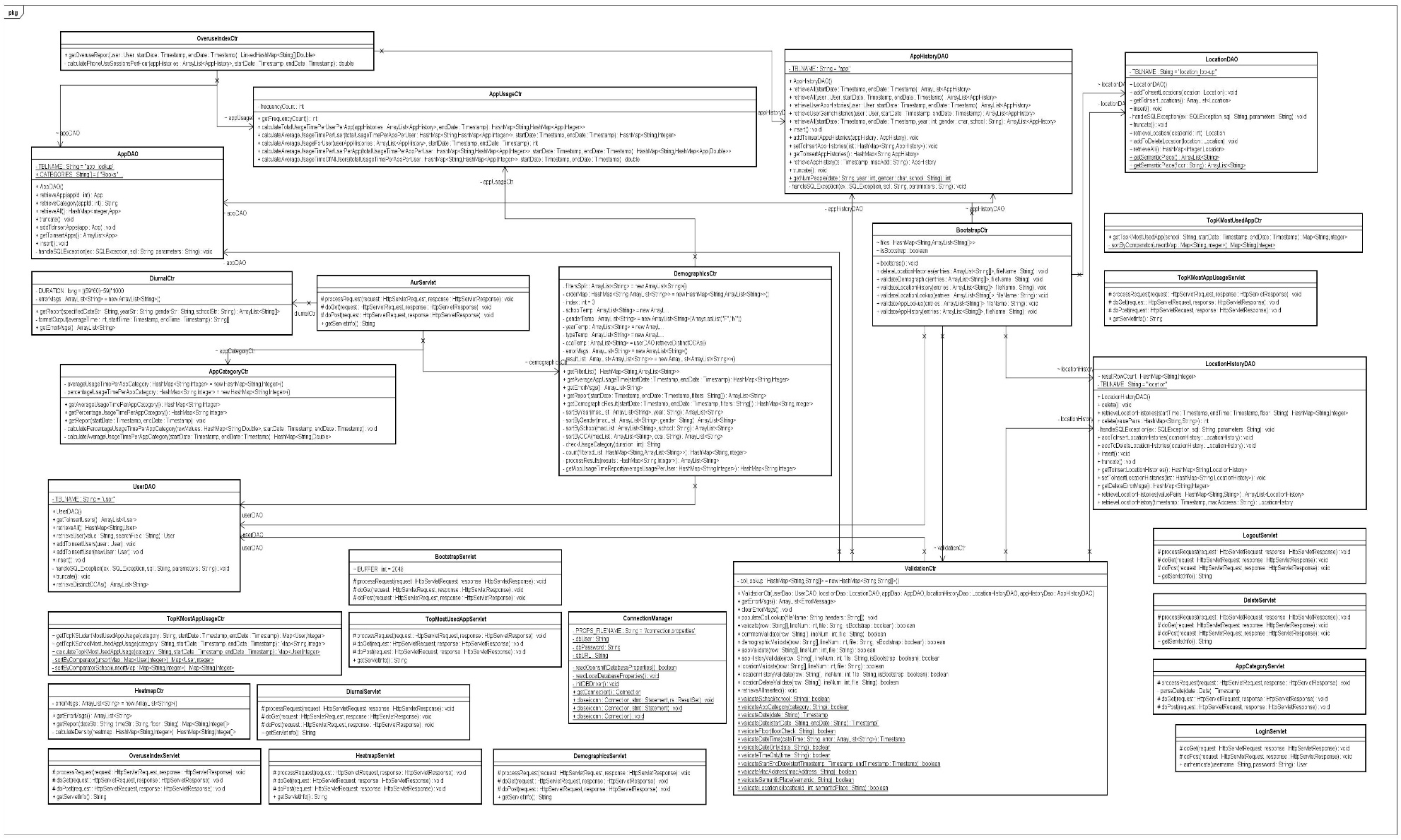


# Class Diagrams

## Core Entity



## Controller and DAO



## Logical Diagram

